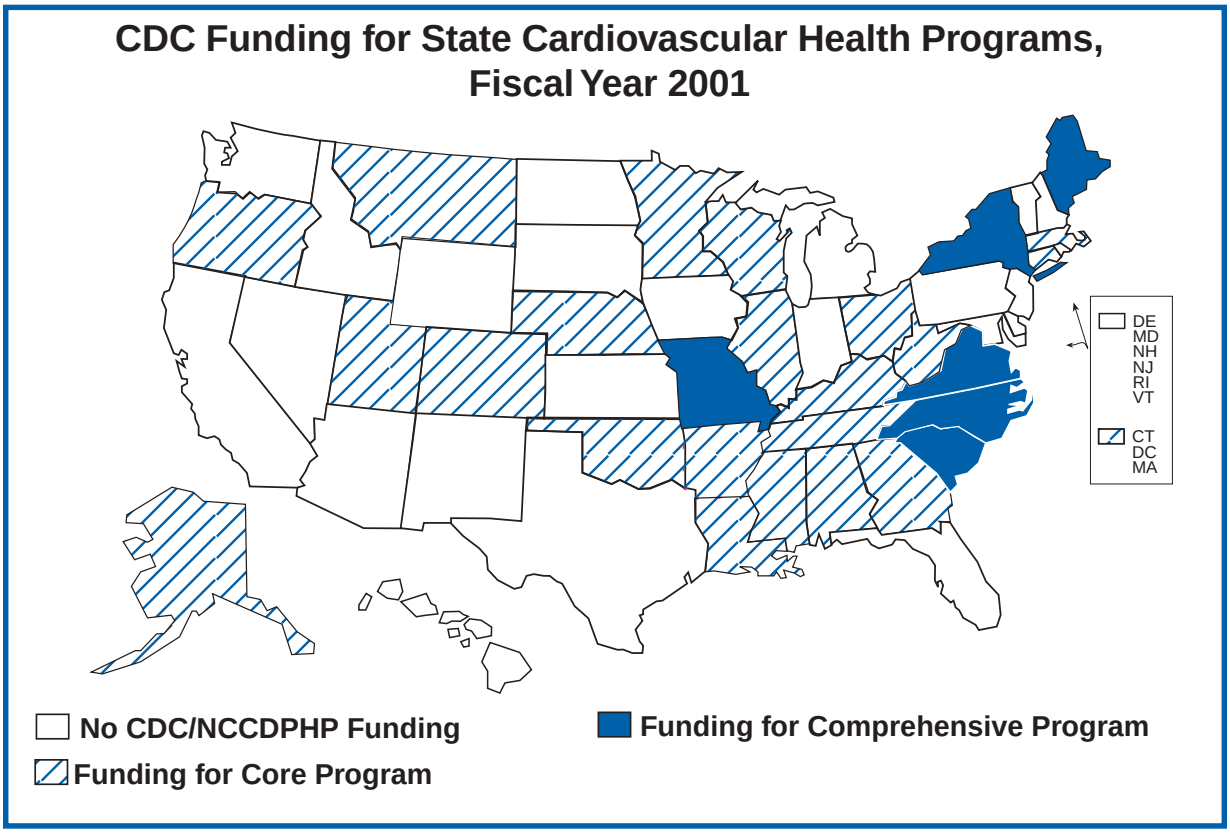
Preventing Heart Disease and Stroke:

Addressing the Nation's Leading Killers

2002



"We have the scientific knowledge to create a world in which most cardiovascular disease could be eliminated. In such a world, preventive practices would be incorporated early in life as a matter of course; everyone would have access to positive healthy living, smoke-free air, good nutrition, regular physical activity, and supportive living and working environments."

The Victoria Declaration on Heart Health

Updated April 2002

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
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Heart Disease and Stroke: The Nation's Leading Killers

Heart disease and stroke—the principal components of cardiovascular disease—are the first and third leading causes of death in the United States, accounting for more than 40% of all deaths. About 950,000 Americans die of cardiovascular disease each year, which amounts to one death every 33 seconds. Although cardiovascular disease is often thought to primarily affect men and older people, it is a major killer of women and people in the prime of life. More than half of all cardiovascular disease deaths each year occur among women.

Deaths Only Part of the Picture

A consideration of deaths alone understates the burden of cardiovascular disease. About 61 million Americans (almost one-fourth of the population) live with this disease. Heart disease is a leading cause of disability among working adults. Stroke alone accounts for disability among more than 1 million Americans. Almost 6 million hospitalizations each year are due to cardiovascular disease.

The economic impact of cardiovascular disease on the U.S. health care system continues to grow as the population ages. The estimated cost of cardiovascular disease in the United States in 2001 is $298 billion, including health care expenditures and lost productivity.

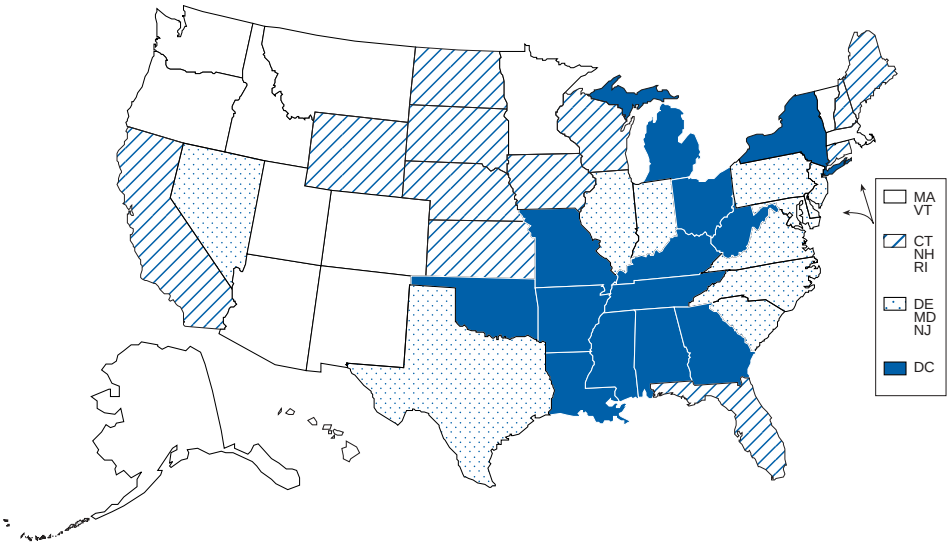
Risk Behaviors Are Largely Responsible

Three health-related behaviors contribute markedly to heart disease and stroke:

- *Tobacco use*. Smokers have twice the risk for heart attack of nonsmokers. Nearly one-fifth of all deaths from cardiovascular disease, or about 190,000 deaths a year, are smoking-related. Every day, more than 3,000 young people become daily smokers.
- *Lack of physical activity*. People who are not physically active have twice the risk for heart disease of those who are active. More than half of U.S. adults do not achieve recommended levels of physical activity.
- *Poor nutrition*. People who are overweight have a higher risk for cardiovascular disease. Almost 60% of U.S. adults are overweight or obese. Only 18% of women and 20% of men report eating five servings of fruits and vegetables each day.

Modifying these behaviors is critical both for preventing and for controlling cardiovascular disease. Other steps that adults with cardiovascular disease should take to reduce their risk for death and disability include adhering to treatment for high blood pressure and cholesterol, using aspirin as appropriate, and learning the symptoms of heart attack and stroke.

Rates of Death Due to Diseases of the Heart,* 1999



*Deaths per 100,000, age adjusted to 2000 total U.S. population.

CDC's National Leadership

Establishing a Nationwide Prevention Program

CDC has provided leadership in developing *Preventing Death and Disability from Cardiovascular Diseases: A State-Based Plan for Action*, a plan to ensure that every state is part of a comprehensive national program to prevent cardiovascular disease and target its risk factors.

With fiscal year 2001 funding of approximately $35 million, CDC supported 21 states and the District of Columbia to develop cardiovascular health programs and provided more substantive support to six states for comprehensive programs. For fiscal year 2002, Congress has appropriated $37.4 million to support CDC's cardiovascular health program. CDC works with key partners such as the American Heart Association; the American Stroke Association; the Centers for Medicare and Medicaid Services; the National Heart, Lung, and Blood Institute; the National Institute of Neurological Disorders and Stroke; and the National Stroke Association to establish critical national elements to support state-based programs. These elements include health communications, epidemiologic research, state-based surveillance, and outreach to community health centers.

Strengthening the Science Base

CDC strengthens and expands the scientific basis for prevention by examining the health effects of major risk factors. For example, CDC's National Standards Laboratory is a state-of-the-art facility that supports research to better define the relationship between levels of cholesterol and other related lipids and the risk of developing heart disease. This laboratory has established national reference standards for cholesterol measurement that are used throughout the country.

Targeting Risk Behaviors

Studies have shown that people can reduce their risk for cardiovascular disease by modifying their behavior. For example, quitting smoking reduces a person's risk for heart disease. Improved nutrition and increased physical activity help to control high blood pressure, lower cholesterol, and reduce obesity.

To reduce the prevalence of tobacco use, CDC supports and coordinates tobacco-use prevention programs in all 50 states and the District of Columbia. These programs target groups most at risk, including young people, members of racial and ethnic minorities, women, and people of low socioeconomic status.

In fiscal year 2001, Congress provided funding for CDC to conduct applied research on obesity and to work with 12 states to develop nutrition and physical activity programs to prevent and control obesity and other chronic diseases.

First National Conference

The First National CDC Prevention Conference on Heart Disease and Stroke, held in August 2001 in Atlanta, GA, was attended by more than 400 participants representing state health departments, federal agencies, and national partners. The focus was on building and expanding comprehensive state-based cardiovascular health programs through an emphasis on environmental and policy interventions. Examples of such interventions include establishing good nutrition policies in schools and promoting physical activity in the workplace.

Investing in Our Children's Future

Reducing the burden of cardiovascular disease in the United States largely depends on reaching young people early, before they adopt unhealthy behaviors. In 2001, CDC provided 20 states with the resources to support coordinated school health programs. These programs give young people the skills they need to avoid health risks such as tobacco use, unhealthy eating, and inadequate physical activity.

State Programs in Action:

In South Carolina, 93 teachers from 11 school districts attended a 1-day workshop that trained teachers to help students avoid risk behaviors for cardiovascular disease. Follow-up evaluation showed that 70% of the participating teachers incorporated the skills they learned into their daily classroom lessons.

The New York Healthy Heart Program developed a tool for assessing heart-healthy policies and environments and applied this tool at over 100 worksites. As a result of this assessment, worksites increased the number of environmental supports for heart health by 65%. These supports included more low-fat food choices, smoke-free policies, physical activity breaks, and safer stairwells.

Surveillance Provides Vital Information

Monitoring the burden of cardiovascular disease is critical to the success of prevention efforts.

Measuring the Disease Impact

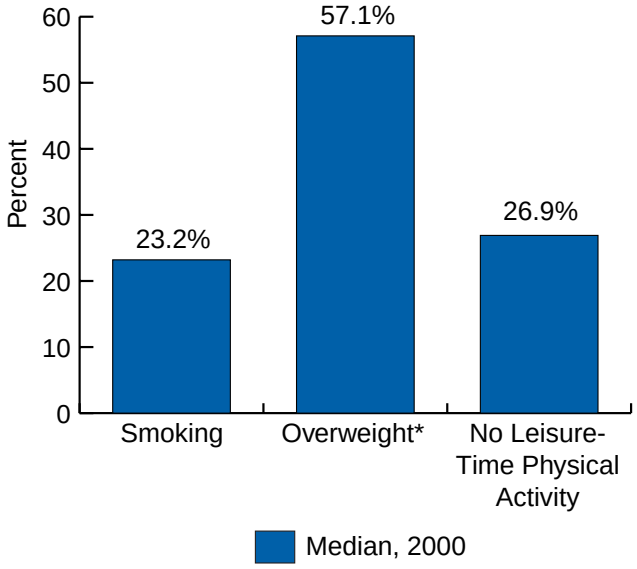
CDC has developed chronic disease surveillance reports, such as *The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives*. These reports provide state-based information on the prevalence of cardiovascular disease and associated risk factors. CDC has also developed more detailed monographs that highlight the health and economic burden of cardiovascular disease in specific populations. For example, *Women and Heart Disease, An Atlas of Racial and Ethnic Disparities in Mortality* presents county-level maps of heart disease among women. This atlas provides the information needed to identify communities of women at greatest risk for heart disease and to tailor prevention efforts to those communities. A similar atlas, *Men and Heart Disease, An Atlas of Racial and Ethnic Disparities in Mortality*, was published in 2001.

Essential Information on Risk Factors

CDC's state-based Behavioral Risk Factor Surveillance System (BRFSS) is a unique source of information on behaviors that increase the risk for cardiovascular disease. This system gathers information from adults in all 50 states on knowledge, attitudes, and behaviors related to key health issues, such as tobacco use, dietary patterns, levels of leisure-time physical activity, and use of preventive services. Information from the BRFSS enables CDC and the states to better target scarce health resources by determining the populations most at risk.

For a decade, CDC's Youth Risk Behavior Surveillance System (YRBSS) has provided key data, nationally and by state, about the prevalence of health risk behaviors among young people—including tobacco use, lack of physical activity, and poor nutrition. Using YRBSS data, states can monitor changes in health risk behaviors over time and can better target health promotion efforts to young people.

Behavioral Risk Factors for Cardiovascular Disease Among U.S. Adults



*Body mass index ≥25.0 kg/m^2.
Source: CDC, Behavioral Risk Factor Surveillance System, 2000.

Stroke Registry

In fiscal year 2001, Congress appropriated $4.5 million for CDC to establish the Paul Coverdell National Acute Stroke Registry. Michigan, Georgia, Ohio, and Massachusetts are developing prototypes for a state-wide hospital-based registry. Such models could be used to guide state efforts to reduce death and disability from stroke and to improve the quality of life for stroke survivors.

Future Directions

CDC's Cardiovascular Health Program hopes to increase both the number of states funded and the number funded at the comprehensive level. The development of state-based disease registries and electronic reporting mechanisms will enhance state programs and national data collection.

For more information or additional copies of this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K–13, 4770 Buford Highway NE, Atlanta, GA 30341-3717, (770) 488-5080.
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